

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appln. No: To Be Assigned  
Applicant: Shaomin Samuel Mo  
Filed: Herewith  
Title: ULTRA WIDEBAND SCRAMBLER FOR REDUCING POWER SPECTRAL DENSITY  
TC/A.U.:  
Examiner:

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO/SB/08a (and/or PTO/SB/08b) form submitted herewith. A copy of the reference(s) listed on the PTO/SB/08a (and/or PTO/SB/08b) form, other than U.S. patents, is enclosed.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

The references on the PTO/SB/08a and PTO/SB/08b was cited by a foreign patent office in a counterpart foreign application. A copy of this English language search report, indicating the degree of relevance determined by the foreign patent office is submitted herewith. MPEP Section 609(a)iii, second paragraph.

10/575178

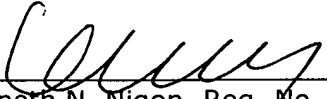
MATI-239US

PATENT

1AP20 Rec'd PCT/PTO 07 APR 2006

This Information Disclosure Statement is being filed concurrently with the above-referenced application.

Respectfully submitted,

  
Kenneth N. Nigon, Reg. No. 31,549  
Attorney for Applicants

KNN/pb

Enclosures: PTO/SB/08a (and/or PTO/SB/08b)  
(3) References

Dated: April 7, 2006

P.O. Box 980  
Valley Forge, PA 19482-0980  
(610) 407-0700

☒ P.O. Box 980  
Valley Forge, PA 19482  
(610) 407-0700

☐ P.O. Box 1596  
Wilmington, DE 19899  
(302) 778-2500

**EXPRESS MAIL**

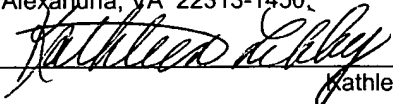
Mailing Label Number:

EV 689 864 077 US

Date of Deposit:

April 7, 2006

I hereby certify that this paper and fee are being deposited, under 37 C.F.R. § 1.10 and with sufficient postage, using the "Express Mail Post Office to Addressee" service of the United States Postal Service on the date indicated above and that the deposit is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Kathleen Libby

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 1 of 2

Complete if Known

Application Number	To Be Assigned <b>10/575178</b>
Filing Date	Herewith
First Named Inventor	Shaomin Samuel Mo
Art Unit	
Examiner Name	
Attorney Docket No.	MATI-239US

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		US-5,241,602	08-31-1993	Lee et al.	
		US-2004/0156504 A1	08-12-2004	Mo et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	1.	WO 2004/080020 A2	09-16-2004	Matsushita Electric Industrial Co., Ltd.		<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional).

<sup>2</sup>See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

<sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

<sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 2 of 2

Complete if Known

Application Number

To Be Assigned

10/575178

Filing Date

Herewith

First Named Inventor

Shaomin Samuel Mo

Art Unit

Examiner Name

Attorney Docket No.

MAT-239US

## NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	A.	MO, Data Whitening in Base-band to Reduce PSD of UWB Signals, IEEE Standards Association, Online, September 17, 2003, XP001360343 Retrieved from the Internet: URL: <a href="http://grouper.ieee.org/groups/802/15/pub/2003/Mar03/03122r1P892-15_TG3a-Panason, ic-CFP-Docment.doc, P802.15;">http://grouper.ieee.org/groups/802/15/pub/2003/Mar03/03122r1P892-15_TG3a-Panason, ic-CFP-Docment.doc, P802.15;</a>	<input type="checkbox"/>
	B.	MO S. S. et al., Frame Synchronization in UWB Using Multiple SYNC words to Eliminate Line Frequencies, IEEE, vol. 2, March 16, 2003, pgs. 773-778	<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional).

<sup>2</sup>Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.